

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number 050-002

Product name Glass Cleaner

Effective date 29-Jun-2010

Company information Sprayway, Inc.

484 Vista Ave. Addison, IL 60101 United States

Company phone General Assistance 630-543-7600

Emergency telephone US 800-424-9300 Emergency telephone outside US 703-527-3887

Version # 18

Supersedes date 12-Feb-2010

2. Hazards Identification

Emergency overview Aerosol. CONTENTS UNDER PRESSURE.

Prolonged exposure may cause chronic effects. May be ignited by heat, sparks or

flames.

Potential health effects

Routes of exposure Skin contact. Ingestion.

Eyes Health injuries are not known or expected under normal use.

Skin May be harmful if absorbed through skin. Frequent or prolonged contact may defat and

dry the skin, leading to discomfort and dermatitis.

InhalationIntentional misuse by concentrating and inhaling the product can be harmful or fatal.IngestionExposure by ingestion of an aerosol is unlikely. Components of the product may be

absorbed into the body by ingestion.

Target organs Kidneys.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged and may cause blood damage. These effects have not been

observed in humans.

Blood. Liver.

Chronic effects Unconsciousness. Cyanosis (blue tissue condition, nails, lips, and/or skin). May be

harmful if absorbed through skin. Liver injury may occur. Kidney injury may occur. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and

dermatitis.

Signs and symptoms Cyanosis (blue tissue condition, nails, lips, and/or skin). Liver enlargement. Jaundice.

Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

| Components | CAS# | Percent |
|--|----------|---------|
| Ethyl Alcohol | 64-17-5 | 1 - 3 |
| 2-Butoxyethanol | 111-76-2 | 1 - 3 |
| Propane | 74-98-6 | 1 - 3 |
| n-Butane | 106-97-8 | 1 - 3 |
| Non-hazardous and other components below reportable levels | | > 90 |

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation

develops or persists.

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Skin contact

Immediately take off all contaminated clothing. Wash off with warm water and soap. Get

medical attention if irritation develops and persists.

Inhalation

Ingestion

If symptoms develop move victim to fresh air. Get medical attention if symptoms occur. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If ingestion of a large amount does occur, call a poison control center immediately.

5. Fire Fighting Measures

Flammable properties

Heat may cause the containers to explode. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media

Protection of firefighters

Protective equipment and precautions for firefighters Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

In case of fire and/or explosion do not breathe fumes. Containers should be cooled with water to prevent vapor pressure build up. Move containers from fire area if you can do so without risk. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

6. Accidental Release Measures

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Should not be released into the environment.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

7. Handling and Storage

Handling

Pressurized container: Do not pierce or burn, even after use. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke while using or until sprayed surface is thoroughly dry. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear

personal protective equipment. Avoid prolonged exposure.

Storage

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat and flame. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Level 1 Aerosol (NFPA 30B)

8. Exposure Controls / Personal Protection

Exposure limits

| Λ | COL | |
|---|------|---|
| А | CGII | 7 |

| Components | CAS# | TWA | STEL | Ceiling |
|-----------------|----------|----------|-----------------|-----------------|
| Ethyl Alcohol | 64-17-5 | 1000 ppm | 1000 ppm | Not established |
| 2-Butoxyethanol | 111-76-2 | 20 ppm | Not established | Not established |
| Propane | 74-98-6 | 1000 ppm | Not established | Not established |
| n-Butane | 106-97-8 | 1000 ppm | Not established | Not established |

OSHA

| Components | CAS# | TWA | STEL | Ceiling |
|-----------------|----------|----------|-----------------|-----------------|
| Ethyl Alcohol | 64-17-5 | 1000 ppm | Not established | Not established |
| 2-Butoxyethanol | 111-76-2 | 50 ppm | Not established | Not established |
| Propane | 74-98-6 | 1000 ppm | Not established | Not established |

Personal protective equipment

Eye / face protection Chemical goggles are recommended.

Wear appropriate chemical resistant clothing. Chemical resistant gloves. Skin protection

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Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance Compressed liquefied gas. **Boiling point** 204.8 °F (96.1 °C) estimated

Color Colorless.

Flammability (HOC) 3.2733 kJ/g estimated

Flash back No.

Flash point -156 °F (-104.4 °C) Propellant

Form Aerosol.

Odor Butyl
pH 9.5 - 10.5

Physical state Liquid.

Pressure 70 - 90 psig @ 70F
Solubility Completely
Specific gravity 0.9605 estimated

10. Chemical Stability & Reactivity Information

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known.

Hazardous decomposition products Irritants. Toxic gas.

11. Toxicological Information

Acute effects Acute LD50: 7571 mg/kg estimated, Rat, Dermal

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

2-Butoxyethanol 111-76-2 Inhalation LC50 Rat 2.21 mg/L 4 h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat

470 mg/kg; Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg

Ethyl Alcohol 64-17-5 Oral LD50 Rat 7060 mg/kg
n-Butane 106-97-8 Inhalation LC50 Rat 658 mg/L 4 h
Propane 74-98-6 Inhalation LC50 Rat 658 mg/L 4 h

Sensitization Not expected to be hazardous by OSHA criteria.

Carcinogenicity Hazardous by OSHA criteria. Cancer hazard. Risk of cancer cannot be excluded with

prolonged exposure.

IARC - Group 1 (Carcinogenic to Humans)

Ethyl Alcohol 64-17-5 Monograph 96 [in preparation] (in alcoholic beverages)

Reproductive effects Hazardous by OSHA criteria. Possible reproductive hazard.

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental

concerns.

LC50 36327 mg/L estimated, Fish, 96.00 Hours, EC50 26428 mg/L estimated, Daphnia, 48.00 Hours, IC50 11902 mg/L estimated, Algae, 72.00 Hours,

13. Disposal Considerations

Disposal instructionsContents under pressure. Do not puncture, incinerate or crush. Do not allow this material

to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:

Proper shipping name Consumer commodity

Hazard class ORM-D Subsidiary hazard class None

Additional information:

Packaging exceptions 156, 306
Packaging non bulk 156, 306
Packaging bulk None

IMDG

Basic shipping requirements:

Proper shipping name AEROSOLS

Hazard class2.1UN number1950

Additional information:

Packaging exceptionsLTD QTYItem5FLabels requiredNoneTransport Category2



Basic shipping requirements:

Proper shipping name Aerosols, flammable

Hazard class 2.1 UN number 1950

Additional information:

Packaging exceptions LTD QTY
Labels required 2.1





15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

2-Butoxyethanol 111-76-2 1.0 % de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3,

R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or

sulfonate, Chemical Category N230)

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous Yes

chemical

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 302 extremely No

hazardous substance

Section 311 hazardous chemical Yes

Hazard categories (311/312) Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No

Inventory status

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of New and Existing Chemicals (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

U.S. - Pennsylvania - RTK (Right to Know) List

2-Butoxyethanol 111-76-2 Present Ethyl Alcohol 64-17-5 Present n-Butane 106-97-8 Present Propane 74-98-6 Present

16. Other Information

HMIS® is a registered trade and service mark of the NPCA. **Further information**

Health: 1 **HMIS®** ratings

Flammability: 2 Physical hazard: 0

The information provided in this Safety Data Sheet is correct to the best of our **Disclaimer**

> knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information in the sheet was written based on the best knowledge and

experience currently available.

MSDS sections updated Toxicological Information: Reproductivity

Regulatory Compliance Prepared by

MSDS US Product #: 050-Glass Cleaner 5/5